Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended). A method of compressing image data comprising the step of varying a magnitude of a quantization step as a function of a distortion of an image, wherein the magnitude of said quantization step is increased for higher frequencies relative to lower frequencies as the data rate of transmission of said image data decreases, wherein the magnitude of said quantization step is decreased for higher frequencies relative to lower frequencies as the data rate of transmission of said image data increases.

Claim 2 (previously presented): The method of claim 1 wherein the step of varying a magnitude of a quantization step as a function of a distortion of an image comprises the step of decreasing a range of lower frequency transform coefficient values included in a first quantization step relative to a range of higher frequency transform coefficient values included in a second quantization step as said distortion of said image increases.

Claim 3 (previously presented): The method of claim 1 wherein the step of varying a magnitude of a quantization step as a function of a distortion of an image comprises the step of decreasing a range of lower frequency transform coefficient values included in a first quantization step relative to a range of higher frequency transform coefficient values included in a second quantization step when said distortion of said image exceeds a threshold distortion.

Claim 4 (previously presented): The method of claim 1 wherein the step of varying a magnitude of a quantization step as a function of a distortion of an image comprises the

step of decreasing a range of lower frequency transform coefficient values included in a first quantization step relative to a range of higher frequency transform coefficient values included in a second quantization step as a data rate decreases.

Claim 5 (previously presented): The method of claim 1 wherein the step of varying a magnitude of a quantization step as a function of a distortion of an image comprises the step of decreasing a range of lower frequency transform coefficient values included in a first quantization step relative to a range of higher frequency transform coefficient values included in a second quantization step as a decrease in a data rate exceeds a threshold decrease.

Claim 6 (previously presented): The method of claim 1 wherein the step of varying a magnitude of a quantization step as a function of a distortion of an image comprises the step of decreasing a range of lower frequency transform coefficient values included in a first quantization step relative to a range of higher frequency transform coefficient values included in a second quantization step if a peak-to-mean amplitude of said distortion at least equals a frequency detection threshold of a basis function.

Claims 7-12 (canceled).

Claim 13 (currently amended): A method of compressing an image comprising the steps of:

    (a)   separating data representing said image into a plurality of image data frequency sub-bands;

    (b)   transforming said data to a plurality of transform coefficients;

    (c)   mapping said transform coefficients to a plurality of quantizer

indices, each said quantizer index comprising a plurality of digits arrayed from a most significant digit to a least significant digit;

(d)   adding said most significant digits of said quantizer indices representing an image data frequency sub-band to a bitstream;

(e)   repeating step (d) for a less significant digit of said quantizer indices until a number of significant digits specified by a truncation limit for said image data frequency sub-band is reached; and

(f)   varying said truncation limit for at least two of said image data frequency sub-bands as a function of a distortion of said image, wherein the magnitude of the quantization is increased for higher frequencies relative to lower frequencies as the data rate of transmission of said image data decreases, wherein the magnitude of the quantization is decreased for higher frequencies relative to lower frequencies as the data rate of transmission of said image data increases.

Claim 14 (previously presented): The method of claim 13 further comprising the step of varying said truncation limit as a function of a frequency of said image data represented by said image data frequency sub-band.

Claim 15 (previously presented): The method of claim 13 wherein the step of varying said truncation limit for at least two of said image data frequency sub-bands as a function of a distortion of said image comprises varying said truncation limit to increase a number of significant digits added to said bit stream for a lower frequency image sub-band relative to a number of significant digits added to said bit stream for a higher frequency sub-band as said distortion of said image increases.

Claim 16 (previously presented): The method of claim 15 further comprising the step of varying said truncation limit as a function of a frequency of said image data represented by said image data frequency sub-band.

Claims 17-18 (canceled).